

**Garant**
**Solid carbide torus cutter, Diamond, Ø e8 DC / R1: 12/1,5mm**

**Order data**

Order number	209755 12/1,5
GTIN	4045197475404
Item class	11Y

**Description**
**Version:**

With the latest generation of **crystalline diamond coating sp<sup>3</sup>**, for process reliability in machining **fibre-reinforced composites, CRP, GRP and graphite**. Double relief ground side clearance angle.

Tolerance: Corner radius  $R_1 = \pm 0.01$  mm.

**Technical description**

No. of teeth Z	4
Recess Ø D <sub>1</sub>	11 mm
Feed f <sub>z</sub> for side milling in graphite	0.105 mm
Feed f <sub>z</sub> for copy milling in graphite	0.105 mm
Overhang length L <sub>1</sub> incl. recess	38 mm
Corner radius R <sub>1</sub>	1.5 mm
Cutting edge Ø D <sub>c</sub>	12 mm
Shank Ø D <sub>s</sub>	12 mm
Flute length L <sub>c</sub>	12 mm
Overall length L	83 mm
Shank	DIN 6535 HA to h6
Helix angle	30 degrees
Coating	Diamond

Tool material	Solid carbide
Standard	Manufacturer's standard
Tolerance nominal $\varnothing$	e8
Spacing of the cutters	unequal spacing
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	0.2×D for side milling
Cutting width $a_e$ for milling operation	0.05×D for copy milling
Through-coolant	no
Shank tolerance	h6
Colour ring	black
Type of product	Torus cutter

## User data

	Suitability	$V_c$	ISO code
PVDF GF20	suitable	200 m/min	N
POM GF25	suitable	190 m/min	N
PA 66 GF30	suitable	170 m/min	N
PEEK GF30	suitable	150 m/min	N
PTFE CF25	suitable	180 m/min	N
PEEK CF30	suitable	160 m/min	N
Hybrids	suitable		
Honeycomb sandwich	suitable	350 m/min	N
GRP	suitable	190 m/min	N
GRP, CRP	suitable	190 m/min	N
Graphite	suitable	340 m/min	N
wet minimum	suitable		
dry	Suitable		
Air	suitable		

## Services

Shank grinding Type HB

129100 HB